IN THE SPECIFICATION

Please amend the Paragraphs [003], [004], [006], [009], [011], [015], [016], [018]-[020], [022], [023], [025], [027], [029]-[032], [034] and add Paragraph [038] as shown below, in which deleted terms are shown with strikethrough and/or double brackets, and added terms are shown with underscoring. Also, please amend the headings appearing between Paragraphs [005]-[006] and between Paragraphs [013]-[014] as shown below.

Paragraph [003]   In the flow cell 100 used for a conventional particle measuring apparatus, inner walls b, c, d, and e ~~unpreferably~~ disadvantageously limit the path of light scattered Ls by particles passing through a particle monitoring area M, and the condensing angle of the condenser lens system 101 cannot be fully utilized.

Paragraph [004]   ~~In order to make~~ Contrary to the conventional apparatus, if the level of detecting scattered light, and hence ~~Ls so as to improve~~ the accuracy of detecting particles, is to be improved, it is necessary to fully utilize the condensing angle of the condenser lens system 101.

Paragraph [006]   For solving the above-mentioned drawbacks, according to an aspect of the present invention, there is provided a flow cell in which a particle monitoring area is formed within the flow cell by irradiating the area with light, and light scattered by particles contained in sample fluid passing through the particle monitoring area is condensed by a condenser [[means]] so as to obtain information including ~~a particle~~ diameter of the particles, wherein inner walls of

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the flow cell are ~~provided~~ arranged such that the light scattered by particles is condensed in a state where the condensing angle of the condenser [[means]] is fully utilized.

Paragraph [009]   FIG. 2 (a) is a sectional view seen from direction A-A of FIG. 1 and FIG. 2 (b) is a sectional view seen from direction B-B of FIG. 1;

Paragraph [011]   FIG. 4 (a) is a sectional view seen from direction C-C of FIG. 3 and FIG. 4 (b) is a sectional view seen from direction D-D of FIG. 3;

Paragraph [015]   FIG. 1 is a perspective view of the first embodiment of a flow cell according to the present invention, FIG. 2 (a) is a sectional view seen from direction A-A of FIG. 1 and FIG. 2 (b) is a sectional view seen from direction B-B of FIG. 1, FIG. 3 is a perspective view of the second embodiment of a flow cell according to the present invention, FIG. 4 (a) is a sectional view seen from direction C-C of FIG. 3 and FIG. 4 (b) is a sectional view seen from direction D-D of FIG. 3, and FIG. 5 shows a schematic structure of a particle measuring apparatus according to the present invention.

Paragraph [016]   As shown in FIGS. 1 [[and 2]] – 2(b), the flow cell 1 of the first embodiment is made of a transparent member, and provided with a passage 2 for flowing sample fluid therethrough in a direction of the arrow so as to form a particle monitoring area M with respect to laser light La, and another passage 3 having two exits at [[both]] opposite ends which is perpendicular to the passage 2 and located between the passage 2 and a condenser lens L.

Paragraph [018]   The particle monitoring area M is formed in a position where the four

inner walls 2a, 2b, 2c, and 2d of the passage 2 do not hinder scattered light Ls from entering the

outmost ~~periphery~~ peripheral portion of the condenser lens L for condensing the scattered light

Ls, so as to fully utilize the condensing angle of the condenser lens L.

Paragraph [019]   As shown in FIG. 2 (a), both ends of the passage 3 are opened~~, and thereby~~

. By comparison of FIG. 2(a) with the conventional flow cell 100 in FIG. 6(b), it will be

understood that a portion of the inner wall c in the linear passage 100a shown in FIG. 6 (b),

which limits the path of scattered light Ls, is effectively removed or eliminated in the flow cell 1.

Consequently, the scattered light Ls is not hindered or impeded from entering the outmost

periphery portion of the condenser lens L.

Paragraph [020]   In addition, as shown in FIG. 2 (b), the distance between the inner wall 3c

and the inner wall 3d is arranged to be greater than the distance between the inner wall 2c and the

inner wall 2d so as not to hinder scattered light Ls from entering the outmost ~~periphery~~ peripheral

portion of the condenser lens L by the inner walls 3c and 3d. Conversely, in the conventional

flow cell 100 shown in FIGS. 6 and 6(c), the distance between walls d and e is comparable to that

between walls b and c such that the walls d and e hinder the scattered light Ls from entering the

outmost peripheral portion of the condenser lens L.

Paragraph [022] Incidentally, in the first embodiment, both ends of the passage 3 are opened so

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as to form exits. However, it is also possible to open only one end of the passage 3 and close the

other end. In this case, the inner wall for closing the other end must be arranged so as not to

hinder scattered light Ls from entering the outmost ~~periphery~~ peripheral portion of the condenser

lens L.

Paragraph [023]   Next, as shown in FIGS. 3 and 4, the flow cell 10 of the second

embodiment is made of a transparent member, and provided with a passage 11 having a cross

section of a ~~rectangle~~ rectangular shape, a passage 12 of a pyramidal shape, a passage 13 having a

cross section of a ~~rectangle~~ rectangular shape, a passage 14 having a pyramidal shape, and a

passage 15 having a cross section of a ~~rectangle~~ rectangular shape. The particle monitoring area

M is formed within the passage 13 by irradiating sample fluid flowing through the passage 13 in

a direction of the arrow with laser light La.

Paragraph [025]   In addition, as shown in FIGS. 4(a) and 4(b), four inner walls 14a, 14b,

14c, and 14d of the passage 14 are formed so as not to hinder or impede scattered light Ls from

entering the outmost ~~periphery~~ peripheral portion of the condenser lens L. With this, the

condensing angle θ of the condenser lens L for condensing the scattered light Ls can be fully

utilized.

Paragraph [027]   Incidentally, in the second embodiment, the passages 12 and 14 are made

in a pyramidal shape. However, a conical shape is also possible. Also, another condenser lens

may be provided in the opposite position with respect to the flow cell 10, on the opposite side of

the flow cell from the condensing lens L in FIGS. 4(a), 4(b), so as to double the scattered light detecting capability. condensing angle θ.

Paragraph [029]   Next, as shown in FIG. 5, the particle measuring apparatus according to the present invention is comprised of the flow cell 1, a laser light source 20, a condenser lens system 21 including the condenser lens L, and a photoelectric transducer element 22. The flow cell 10 shown in FIG. 3 can be used instead of the flow cell 1 in such apparatus.

Paragraph [030]   The particle monitoring area M is formed by irradiating a predetermined area of the passage 2 of the flow cell 1 with laser light La from the laser light source 20. The optical axis of the laser light La is substantially perpendicular to the central axis of the passage 2 within the passage 2 flow cell 1.

Paragraph [031]   The condenser lens system 21 has an optical axis which corresponds to the central axis of the passage 2, and condenses scattered light Ls generated by particles which has been irradiated with the laser light La in the particle monitoring area M. Incidentally, the condenser lens system 21 does not always need to be positioned [[in]] on the central axis of the passage 2.

Paragraph [032]   The photoelectric transducer element 22 is provided [[in]] on the optical axis of the condenser lens system 21, and receives the scattered light Ls which has been condensed by the condenser lens system 21 so as to transduce the scattered light Ls into voltage,

which varies depending on the intensity of the scattered light Ls. The condenser lens system 21 and subsequent elements are referred to as an optical detecting and processing means.

Paragraph [034]   The scattered light Ls is condensed by the condenser lens system 21 toward the photoelectric transducer element 22 in a state where the condensing angle of the condenser lens system 21 is fully utilized due to the shape of the passages 2 and 3. Next, the scattered light Ls which has been condensed toward the photoelectric transducer element 22 is transduced into voltage which varies depending on the intensity of the scattered light Ls.

Paragraph [038]   Although there have been disclosed what are the present embodiments of the invention, it will be understood that variations and modifications may be made thereto without departing from the spirit of scope of the invention as indicated by the appended claims.

Heading Between Paragraphs [005] and [006].

Disclosure Summary of the Invention

Heading Between Paragraphs [013] and [014].

Best Mode for Carrying Out Detailed Description Of the Invention